

ABSTRACT

An internal qualities inspection system having a receiving tray for placing an inspecting object thereon with a receiving seat and a transmission light passage formed in the receiving tray is arranged to detect light transmitted through the object from below the receiving tray. The inspection system is capable of efficiently detecting the transmission light from inside of each of inspecting objects of varied shapes and varied kinds by adjusting the quantity of light projected on the object according to its size and kind. The system includes in combination a light receiving part and a calibration arrangement which are not affected by any disturbance light to ensure a highly reliable measuring accuracy. In the system, a light projecting part is arranged to project light on the inspecting object from many lamps from both the right and left sides of a transport path; the light receiving part has a light reducing filter arranged between a condenser lens and a spectrometer to adjust the quantity of light incident on the spectrometer; and calibration is made by retractably moving a white level calibrating plate forward to cover the upper surface of each of empty receiving trays when more than a predetermined number of empty receiving trays consecutively travel.